

## **LISTING OF THE CLAIMS**

Please amend claims 1-5 and 7-8 as indicated below. This listing of claims replaces all prior versions.

1. (Currently amended) Integrated circuit comprising:

a plurality of modules (~~M1 to M5, CPU~~) for processing applications;~~comprising:~~  
[[ - ]] a global memory (~~GM~~), ~~which can~~ adapted to be shared by said plurality of modules (~~M1 to M5, CPU~~);

[[ - ]] an interconnect means (~~IM~~) for interconnecting said modules (~~M1 to M5, CPU~~) and said global memory (~~GM~~) to allow communications between said modules based on a plurality of communication services (~~C1, C2~~); and

[[ - ]] at least one communication managing unit (~~CMU~~) for managing the communication between said plurality of modules (~~M1 to M5~~), wherein said communication managing unit (~~CMU~~) receives a request for a communication between at least two of said modules (~~M1 to M5, CPU~~) and dynamically selects one of said plurality of communication services (~~C1, C2~~) as basis for the requested communication between the at least two of said modules (~~M1 to M5, CPU~~), and wherein one of the plurality of communication services facilitates a memory-based communication between the at least two of said modules via the global memory and another one of the plurality of communication services allows direct communication between the at least two of said modules.

2. (Currently amended) Integrated circuit according to claim 1, wherein the selected one of the plurality of communication services (~~C1, C2~~), which requires the least fewer interconnect resources than a non-selected one of the plurality of communication services, is selected.

3. (Currently amended) Integrated circuit according to claim 1, wherein ~~a second the~~ communication service that (~~C1~~) is selected allowing allows a memory-based communication between the at least two of said modules is selected (~~M1 to M5, CPU~~), if the granularity when granularities and data rates of the two modules (~~M1 to M5, CPU~~) do

not matches or ~~if~~ when one of said two modules (~~M1-M5, CPU~~) does not ~~comprise~~ have sufficient local buffering.

4. (Currently amended) Integrated circuit according to claim 1, wherein ~~a second~~ the communication service that (~~C2~~) ~~is selected allowing a~~ allows direct communication between the at least two of said modules is selected (~~M1-M5, CPU~~), ~~if the granularity~~ when granularities and data rates of the two modules (~~M1-M5, CPU~~) ~~matches~~ and ~~if~~ when one of said two modules (~~M1-M5, CPU~~) ~~comprises~~ has sufficient local buffering.

5. (Currently amended) Integrated circuit according to claim 3, wherein the selection is performed every time a request for establishing a communication between at least two of said plurality of modules (~~M1 to M5, CPU~~) is received by the communication managing unit (~~CMU~~).

6. (Previously presented) Integrated circuit according to claim 1, wherein resources, which were reserved for the communication between said two of said plurality of modules, are released after having performed the requested communication.

7. (Currently amended) Integrated circuit according to claim 1, wherein said applications ~~running on said modules~~ are resource constrained.

8. (Currently amended) Method for selecting between a plurality of communication services in an integrated circuit, ~~the integrated circuit having comprising~~ a plurality of modules ~~(M1 to M5, CPU)~~ for processing applications, and a global memory ~~(GM)~~ being adapted to be shared between said plurality of modules ~~(M1 to M5, CPU)~~, the method comprising the steps of:

[[ - ]] managing ~~the~~ communications between said plurality of modules ~~(M1 to M5)~~, by receiving a request for a communication between at least two of said modules ~~(M1 to M5, CPU)~~ and

[[ - ]] by dynamically selecting one of said plurality of communication services (~~C1~~, ~~C2~~) as basis for the communication between the at least two of said modules ~~(M1 to M5, CPU)~~, wherein one of the plurality of communication services facilitates a memory-based communication between the at least two of said modules via the global memory and another one of the plurality of communication services facilitates direct communication between the at least two of said modules.